

Assessment & Treatment of Mentally Ill AODA Clients

I. Affective Disorders & ADHD

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Goals

- Understand prevalence of mental illnesses in people with substance use disorders [SUDs]
- Diagnostic Criteria, Differential Diagnosis, and Assessment Strategies
- Natural History of Depressive and ADHD Disorders & Relationship to Subst. Use
- Treatment Issues
- System Issues

Lifetime and Current Prevalence of Strictly Diagnosed Affective Disorders & ADHD Among Adult Substance Abusers

<u>Disorder</u>	<u>Lifetime [%]</u>	<u>Current [%]</u>
Major Depression	15-50	8-20
Dysthymia	10-40	10-30
Bipolar I Disorder	4-8	
Bipolar II Disorder	6-25	
ADHD	20-25	10-20

Substantial Under-Recognition and Substantial Under-Treatment

DEPRESSIVE DISORDERS

“NORMAL” DEPRESSION

MAJOR DEPRESSION

DYSTHYMIA

ADJUSTMENT DISORDER/

PATHOLOGICAL GRIEF

SUBSTANCE-INDUCED

DEPRESSIVE DISORDER

**98% of recently abstinent substance
abusers report depressed mood,
loss of interest, difficulty
concentrating, or anxiety in the past
week**

Most remit spontaneously

DSM-IV Criteria for Major Depression

- ≥ 2 week period of pervasive [daily, severe] sx's [including low or depressed mood [or irritable mood] OR markedly diminished interest and 5 of the following:] [Mnemonic: *SIG: E CAPS*]
- Sleep disturbance: decreased or increased
- Interest markedly diminished in everyday activity
- Guilt, inadequacy, or hopeless thoughts
- Energy markedly diminished or marked fatigue
- Cognitive problems: indecision, inattention, memory decline
- Appetite or weight decrease or increase
- Psycomotor activity increase [pacing] or decrease
- Suicide ideas, plans or attempts
- Associated with significant impairment in social, work, school, or family life

Screening for Major Depressive Episode [MDE]

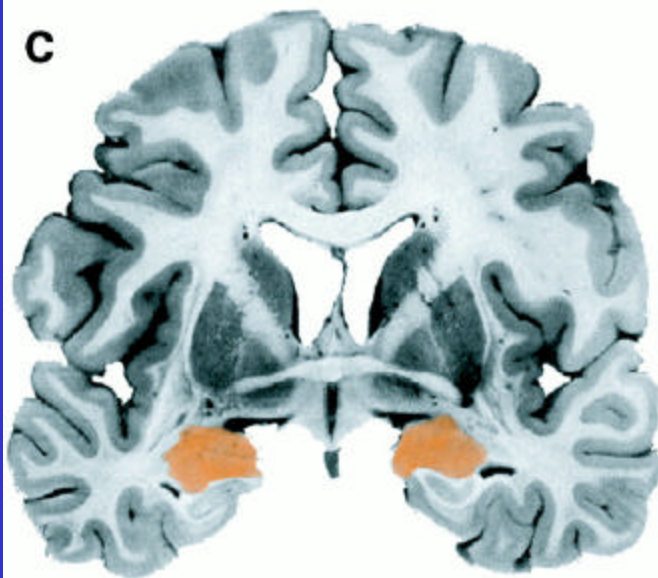
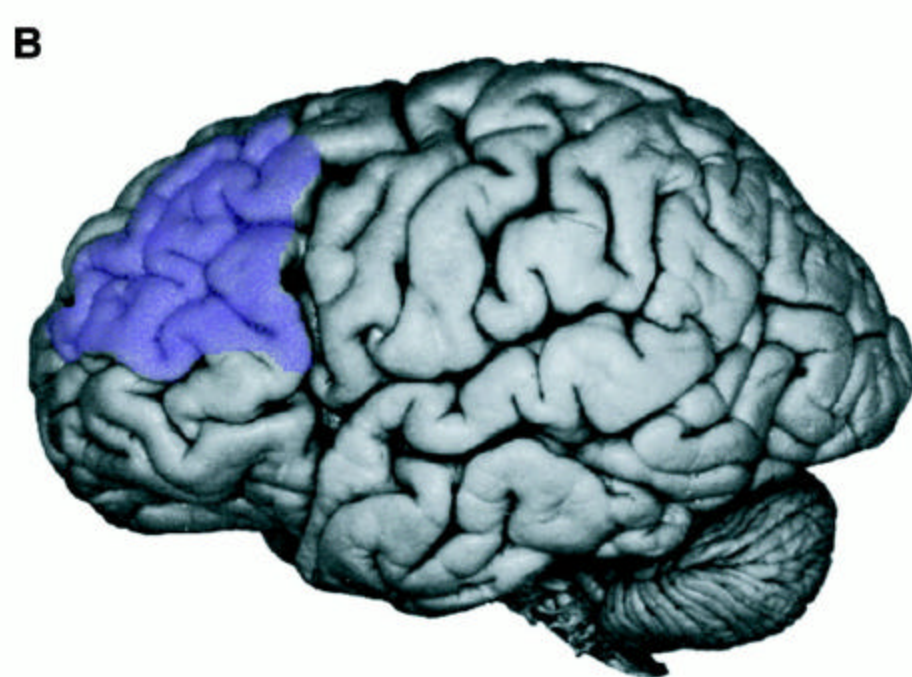
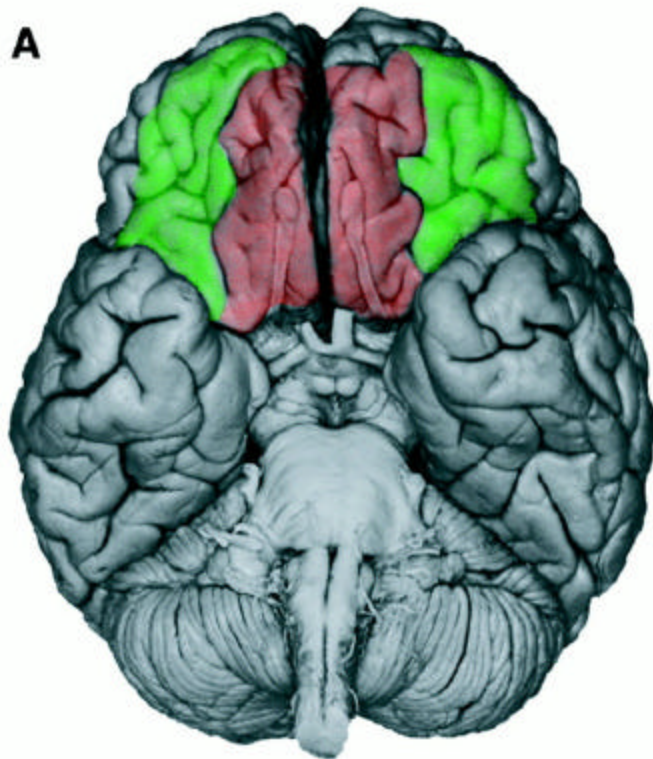
- **PRIME-MD Sensitivity 95%, Specificity 90% in primary care settings; no studies in substance abusers**
- **Screening questions: During the PAST MONTH, have you OFTEN**
 - **been bothered by feeling little interest or pleasure in doing things?**
 - **Felt down, depressed, or hopeless?**
- **IF YES to one of these two, then ask about the other 8 symptoms of MDE**
- **Other: Beck Depression Inventory, Hamilton Depression Rating Scale NO HEAD-TO-HEAD STUDIES**

Major Depression Facts

- 5-9% of US adults have current [past month] [MDE] ; women outnumber men 2:1; heritable
- MDE associated with significantly increased medical care utilization [50% increase in HMO], adjusting for age, gender, and medical comorbidity
- Only 1/4 of MDE pts. see MH specialist; 3/4 see Primary Care Provider
- Unsuccessful MDE Rx associated with increased health care costs [\$1043/yr in Medi-Cal study], poorer Quality of Life
- Treatment of high utilizers with MDE reduced absenteeism, cut health care costs 50%, reduced debility, and improved QOL across several domains

Neurobiological Commonalities in Depression & Substance Dependence

- Depression and substance dependence share some anatomic substates, especially the limbic system and extended amygdala
- Dysphoric mood is a common feature of depression and withdrawal from all major drugs of abuse
- Both depression and drug dependence involve alterations in the brain's monoamine systems, eg, serotonin and dopamine and prefrontal cortex
- New pharmacological treatments are based on an evolving neurobiological understanding of these disorders



Co-Occurring Depression and Substance Dependence May Create Clinical Dilemmas by Affecting

- **Diagnostic findings**
- **Point of illness detection**
- **Treatment planning**
- **Treatment outcome**
- **Mortality risk**

Clinical Significance of Concurrent Depression and Alcoholism

- **Poorer psychosocial functioning and spousal relations**
- **Increased drinking, arrests, blackouts**
- **Increased risk of suicide**
- **Increased risk of relapse to drinking**
- **Increased risk of treatment non-compliance and dropout**
- **More/longer inpatient treatments**

Clinical Treatment of Concurrent Major Depression and Alcoholism

- **Establish abstinence: 3 studies show MDE diagnosis and most depressive symptoms resolve with 4 weeks**
- **Rule out other causes: illnesses, grief**
- **Cognitive Behavioral and Interpersonal Psychotherapy may be helpful: no controlled trials**
- **Evidence for efficacy of TCAs [IMI, DMI]**
- **Evidence for efficacy of SSRIs [fluox, sertraline] especially in suicidal and Type A alcoholics**

Clinical Trials of Co-Occurring Depression and Alcoholism: Abstinent Days Prerandomization

Abstinent Days Prerandomization	Investigators
8 median	Mason et al. (1996)
7 day pbo washout	McGrath et al. (1996)
7	Kranzler et al. (1995)
7 day pbo washout/post detoxification	Cornelius et al. (1995)
7 day pbo washout	Nunes et al. (1993)
Admitted post detoxification	Shaw et al. (1987)

SSRI Treatment of Depression in Alcoholism

- **Greater tolerability and safety in overdose or drinking relapse than TCAs**
- **Decreases alcohol intake**
 - Up to 80% in animal models
 - Up to 26% in nondepressed social drinkers
 - No effect in nondepressed dependent humans
- **Enhance abstinence and decrease in drinking days and drinks/drinking day in dependent humans**
- **Sertraline and Citalopram have less inhibition of hepatic metabolism than other SSRIs**
 - May minimize drug-drug interactions
 - May be preferable for alcoholics on multiple Rx

Antidepressant Side Effects Relevant in Substance Abuse Treatment

<u>Side Effects</u>	<u>Drug Class</u>	<u>Issue</u>
Tremors	SSRIs, TCAs	may mimic w'drawal
Nausea	SSRIs	“
Headaches	SSRIs	“, cause pain
Seizures	Bupropion, TCAs	w/drawal Sz, Eat D/o
Loss Libido	SSRIs, TCAs	noncompliance
Hypertension	MAOIs w/tryptamine	CVA
	Venlafaxine	alcohol-assoc HTN
Hypotension	MAOIs, TCAs	risk falls
Mydriasis	TCAs	mimic withdrawal
Sedation	TCAs, Paxil	increase w/EtOH

Clinical Significance of Depression and Co-Occurring Cocaine and Opiate Dependence

- Depressive symptoms were associated with cocaine and opiate [heroin and Rx] use by addicts in many surveys
- Higher levels of depressive symptoms in cocaine and opiate addicts in treatment have been linked to drug urges and relapses
- New mothers who abused cocaine were less attentive to newborns as a function of current depression

Rationale for Evaluating Antidepressants as Agents to Decrease Cocaine and Opiate Use

- Cocaine and heroin addicts frequently have depressive symptoms
- May treat hypothetical drug-induced neurotransmitter deficiencies
- Depression is major factor determining drug use in treated opiate and cocaine addicts in drug treatment

Clinical Trials Evaluating Antidepressants as Agents to Decrease Cocaine and Heroin Use

- All double-blind med trials have been negative for cocaine *per se*, but small trials positive for depression in cocaine and opiate addicts
- Treatment of comorbid mood disorder improves cocaine and heroin outcome
- High doses, eg, plasma DMI > 200 ng/ml, or fluoxetine or paroxetine 60 mg/day, may decrease cocaine addicts' and MMT-treated heroin addicts' craving

Depression and Nicotine

The Clinical Significance of Co-Occurring Nicotine Dependence and Depression

- Teenagers with depression are twice as likely to smoke and regular smoking predicts MDE
- Smokers have increased risk for MDE
- Nicotine has antidepressant (MAOI) activity
- MDE may be unmasked or increased by nicotine abstinence
- Treating MDE has been associated with a lower rate of smoking relapse

Women and Smoking

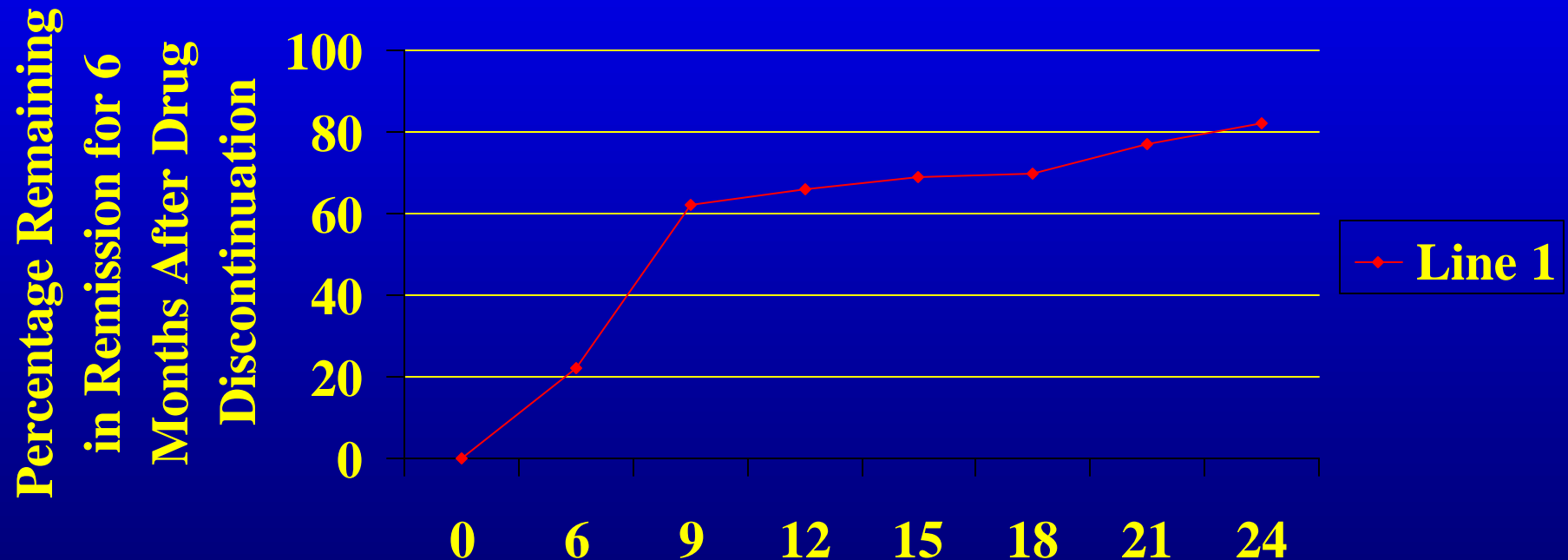
- Higher [2X] rates of MDE than men
- Less likely to quit than men
- More likely to relapse than men
- More likely than men to smoke to reduce distress
- Less responsive to Nicotine Patch than men
- More concerned about weight gain than men
- Menstrual cycle phase may influence craving

Pharmacotherapies for Nicotine Dependence Used Alone or in Combination

- **Nicotine Replacement Products (NRP)**
 - Nicotine polacrilex (gum)
 - Transdermally delivered nicotine (patch)
 - Nasal nicotine spray
 - Nicotine inhaler
- **Bupropion SR (Zyban)**
 - A weak blocker of neural uptake of serotonin, norepinephrine, and dopamine

Theoretical Chance of Remaining in Remission 6 Months After Drug Discontinuation

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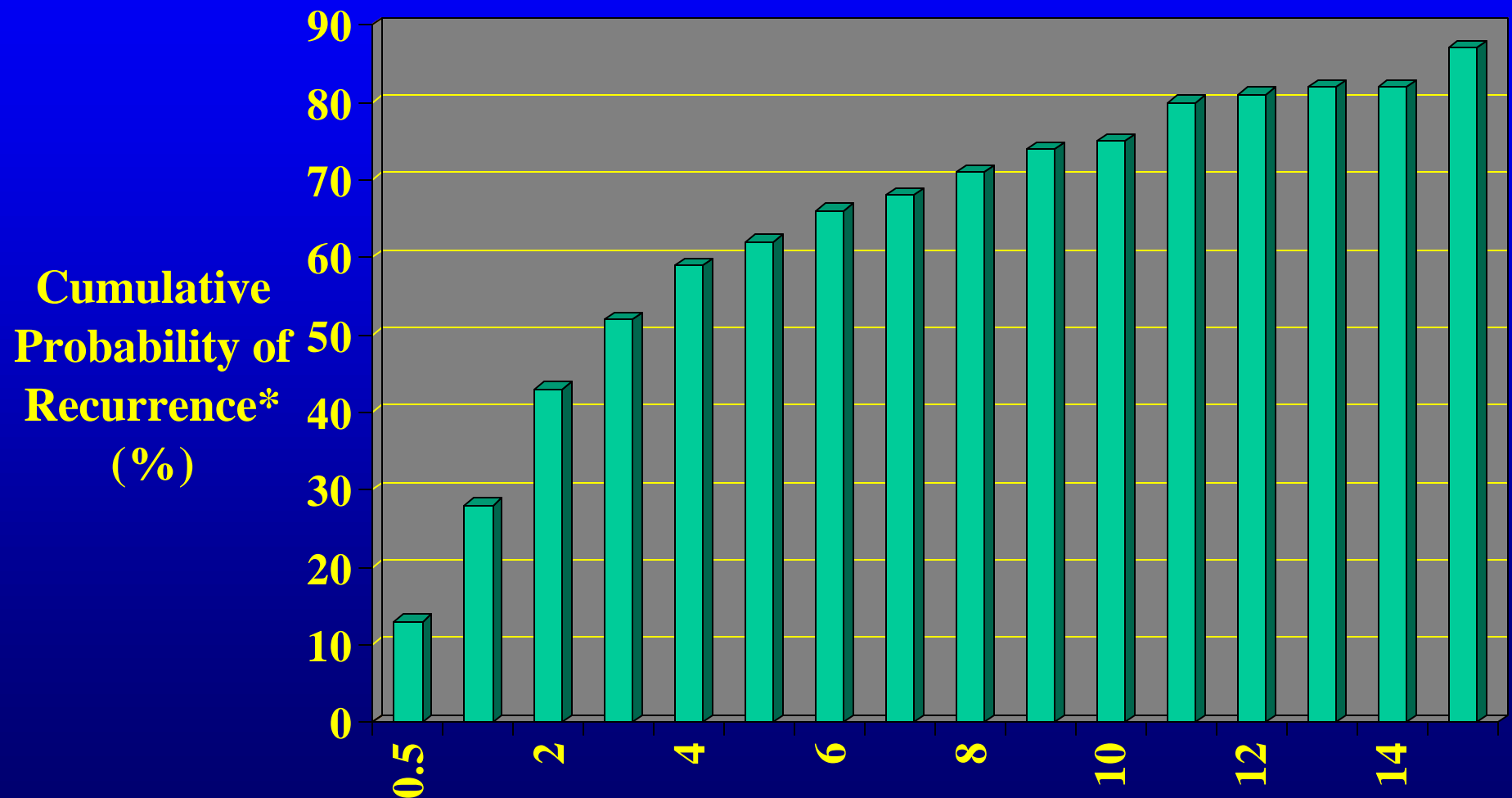


Months of Treatment With Imipramine

^aMavissakalian and Perel, 1992

^bMulticenter study, 1997

Recurrence After Recovery from Index Episode of Major Depression



*Kaplan-Meier life-table estimate

(Lavori et al., 1994; Keller et al., unpublished data [years 6-15])

Rates of Recurrence in Depression

Number of Prior Episodes	Recurrence Rate
1	50%
2	50-90%
≥ 3	90%

(Angst et al., 1973; Keller et al., 1992; Lavori et al., 1994)

The Clinical Significance of Depressive Relapses and Recurrences

- Treatment with antidepressant Rx should continue for at least 9-12 months after full remission has been achieved
- Women are particularly at risk of relapses to Major Depressive Episodes
- Cognitive Behavioral and Interpersonal Psychotherapies reduce risk of relapse and recurrence, even among those who do not achieve remission on psychotherapy alone

**Happiness makes up in height
for what it lacks in length.**

- Robert Frost

DSM-IV Criteria for Dysthymia

- ≥ 2 year period of feeling, more days than not, depressed mood or markedly diminished interest and 3 of the following:] [SIG: E CAPS]
- Sleep disturbance: decreased or increased
- Interest markedly diminished in everyday activity
- Guilt, inadequacy, or hopeless thoughts
- Energy markedly diminished or marked fatigue
- Cognitive problems: indecision, inattention, memory decline
- Appetite or weight decrease or increase
- Psychomotor activity increase [pacing] or decrease
- Suicide ideas, plans or attempts
- **This 2 year period did NOT begin with a major depression**

Clinical Treatment of Concurrent Dysthymia and Alcoholism

- Establish abstinence: 3 studies show depressive symptoms improve in a few weeks
- Rule out other causes: illnesses, grief
- Cognitive Behavioral and Interpersonal Psychotherapy may be helpful: no controlled trials
- No Rx studies
- Also: dysthymia is heritable

Adjustment Disorder/Pathological Grief

- New depressive emotional and/or behavioral symptoms
- In response to identifiable stressful event[s] within 3 months of symptom onset
- Symptoms not explained by MDE, dysthymia, illness, or substance use
- Sxs not representing normal bereavement
- LOW RELIABILITY OF THIS DIAGNOSIS
- NO STUDIES OF PREVALENCE OR TX IN SUBSTANCE ABUSERS
- No substantial heritability

Bipolar Affective Disorder: Diagnosis

- **Uncommon: Rates 0.5-1% [2-6% in Substance Abusers]**
- **Manic episodes: > 7 days [hypomanic > 4d] of persistently elevated, euphoric, or irritable mood, together with > 3 of [SIG: DART]**
- **Sleep disturbance: decreased need for sleep**
- **Increased goal-directed activity**
- **Grandiosity**
- **Dangerous or high risk behaviors**
- **Loose Associations, tangentiality or disorganized speech**
- **Speech rapid or pressured**
- **Racing Thoughts**
- **Bipolar I: Manic Episodes vs. Bipolar II: Hypomanic Episodes w/ depression [more common in sub abusers]**
- **Highly heritable**

Clinical Significance of Concurrent Bipolar I/ II & Substance Use Disorders

- **Poorer psychosocial functioning, lower income, homelessness, and family problems**
- **Increased violence, suicide rates, arrests**
- **Increased risk of relapse to drinking in both manic and depressed episodes**
- **Increased risk of Rx and treatment non-compliance and dropout**
- **More/longer inpatient treatments**
- **Reasons for use: boredom, social, low mood**

Clinical Treatment of Concurrent Bipolar I/ II & Substance Use Disorders

- Establish abstinence: studies show bipolar depression, mania less common w/abstinence
- Rule out other causes: illnesses, injuries
- Rx: Lithium not as effective as valproate.
Other effective Rx: carbamazepine, ?olanzepine, ?gabapentin, etc.: no controlled trials in sub abusers
- Evidence for efficacy of cognitive psychotherapy
- Goal: avoid mixed episodes and rapid cycling periods

ADHD and Substance Use Disorders

- **6-9% ADHD prevalence in children**
- **70% ADHD persistence in adolescence**
- **10-80 [mean 50%] persistence in adults, and persistence to adulthood is SUD risk**
- **Estimates of ADHD in adults 2-5%**
- **ADHD in sub. abusers 30-50%**
- **Significant association with conduct disorder, a major risk factor for SUDs, sp alcohol and cocaine and opiate use d/o's**

Subtypes of ADHD

- **Inattentive:** Primary inattention [careless, seem not to listen, difficulty sustain attention, fail to finish tasks, difficulty organizing tasks, loses things, avoids tasks requiring attention, forgetfulness]
- **Hyperactive:** fidgety, unable to sit still, restless, difficulty acting quietly, on the go, talk excessively
- **Mixed:** Inattentive, hyperactive, and impulsive [blurt answers, interrupt, won't wait turn]

- **KEY FEATURES:** difficulty w/ shifting attention, inhibition of motor behavior, affective self-regulation, internalization of speech, reconstitution after stress/frustration
- **NEUROBIOLOGY:** PFC, DA, Nicotinic Receptors
- **GENETICS:** 5-6x increase in family [est 80% heritable]

Facts about SUD Rx and ADHD

- ADHD associated with 6-8 years earlier onset and higher rates [3-4x] of SUD; SUD in unmedicated ADHD is more chronic; most of this risk is due to concurrent CD
- Medication of teens with stimulants reduces early onset of SUD by 68%
- medicated ADHD youth at similar risk for SUD compared to non-ADHD youth
- unmedicated ADHD youth in mid-adolescence at highest relative risk of SUDs
- no good studies in adults
- evidence for efficacy of bupropion in adolescents and adults with ADHD

Myths about ADHD

- **Overdiagnosis rampant: evidence supports underdiagnosis**
- **Due to excessive sugar intake: no evidence in RCTs**
- **Ritalin abuse rampant: 1% of HS seniors used MPH; 60% only once; 80% was oral; use in HS constant in past 10 yrs. No confirmed cases of addiction to stimulants among ADHD adolescents diagnosed and treated by experienced pediatricians and psychiatrists in >200 med trials.**
- **Easy to diagnose: self report often underestimates**
- **Leads to substance use disorder: major effect mediated by conduct disorder BUT early and aggressive treatment of ADHD reduces risk of SUD**

System Issues I

- Screening, clinical assessment, or referral?
- No studies to guide here. Many difficulty assessment issues. Past diagnoses frequently erroneous.
- Sequential or simultaneous treatment?
- Evidence: treat bipolar, ADHD, MDE simultaneously
- Separate or integrated treatment? Evidence suggests integrated tx better
- No good data on dual diagnosis vs regular groups with these disorders

System Issues II

- Staff reliability and validity in assessment?
- No studies here, but likely is rather low compared with experts. Major issue is training, practice, & supervision. Structured interviews best [e.g., SCID]
- Staff effectiveness in providing psychotherapy for depressive and other disorders?
- No studies, but likely is low. Issues are training, practice, & supervision. Structured manuals effective, but require flexibility and empathy.

System Issues III

- **Acceptability of Rx to staff and clients?**
- **No studies here, but likely is higher for mood stabilizers and antidepressants than stimulants. Issues appear to be fears of misuse, collaborative MD, and staff inexperience with MH Rx, especially ADHD and bipolar disorder.**
- **Add RX monitoring/ compliance into tx plans?**
- **No studies on effective methods, but likely is uncommon. Issues are feeling it is part of AODA counselor role [typically narrowly defined in this area], training, practice, & supervision. Structured manuals available and effective, but require flexibility and empathy.**



"Mr. Osborne, may I be excused?
My brain is full."

Summary

- MDE, dysthymia, bipolar II, and ADHD are common in people with SUDs
- Diagnosis requires careful attention to the specific criteria and ruling out illnesses
- These disorders can be chronic and relapsing and consistent, early treatment can prevent disability
- Pharmacotherapy is effective for these disorders, as is psychotherapy
- System issues need to be addressed

Those who are obsessed with practice, but have no science, are like a [boat's] pilot setting out with no tiller or compass, who will never know for certain where he is going.

-- Leonardo da Vinci